Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Telecommunications Relay Services	)	
and Speech-to-Speech Services for	)	CG Docket No. 03-123
Individuals with Hearing and Speech	)	
Disabilities	)	
	)	
Access to Emergency Services	)	

COMMENTS OF VERIZON

Verizon[1] supports the Commission's efforts to ensure that robust emergency calling capabilities are available to people with hearing or speech disabilities as well as to those without. The Commission's proposal to impose a registration requirement on users of IP Relay and Video Relay services ("VRS"), however, would infringe on the privacy of IP Relay and VRS users and impose significant costs on the providers of these services while doing almost nothing to improve the emergency calling capability provided by these services today. The Commission, therefore, should not adopt such a requirement. Even if the Commission were to adopt some registration requirement, however, IP Relay and Video Relay services should remain subject to the Commission's jurisdiction for both oversight and funding.

[1] On Jan. 6, 2006, MCI, Inc. merged into MCI, LLC, a wholly owned subsidiary of Verizon Communications Inc. Verizon's IP Relay and VRS services are provided by MCI Communications Services, Inc. d/b/a Verizon Business Services ("Verizon").

I. The Commission should not impose a registration requirement on users of IP Relay and Video Relay services.

The Commission's orders have repeatedly recognized that providers of IP Relay and Video Relay services do not receive Automatic Numbering Information ("ANI") or Automatic Location Identification ("ALI") from emergency callers, and that the technology is not currently available accurately to relay emergency calls using these services to emergency service providers or automatically to provide emergency service providers with location information.[2] This situation remains the case today. For this reason, Verizon's IP Relay.com website informs callers that they should use their TTY to call 911. Nevertheless, if a caller requests emergency service from a Verizon IP Relay or VRS operator, the operator will ask the caller for his or her current location, and route the call to an appropriate PSAP. Verizon has developed a national database of current PSAP numbers and, after making a brief inquiry regarding the caller's location, is able to transfer an emergency call dialed through IP Relay or VRS to an appropriate PSAP.[3]

The NPRM asks whether, "[i]n view of the Registered Location requirement adopted in the *VoIP E911 Order*," the Commission should require VRS and IP Relay providers to establish a registration process through which VRS and IP Relay users would provide, in advance, the primary location from which they will be making VRS or IP Relay calls. NPRM ¶ 19. The assumption underlying this question – that VRS and IP Relay services are like VoIP – is

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[2] *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Access to Emergency Services*, 20 FCC Rcd 19476, ¶¶ 13-14 (2005) ("NPRM"), *citing Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities,* 19 FCC Rcd 12475, ¶ 117 (2004); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities,* 18 FCC Rcd 4761, ¶ 28 (2003).

[3] On average, Verizon's IP Relay communications assistants handle approximately 60 emergency calls per month.

mistaken in certain key respects. As a result, the Commission should not impose a registration requirement on IP Relay and VRS.

A. IP Relay and VRS do not use North American Numbering Plan numbers or another standard identifier.

The interconnected VoIP services to which the *VoIP E911 Order* applies assign North American Numbering Plan ("NANP") numbers to subscribers. The solutions by which subscribers' Registered Locations are provided to PSAPs are based on these NANP numbers – databases match a subscriber's number to his or her Registered Location in the event of an emergency call, and provide the Registered Location and the number to the appropriate PSAP in a format consistent with the ANI and ALI the PSAP receives with a wireline call.

By contrast, VRS and IP Relay generally do not use NANP numbers. Instead, because they originate on the Internet, they have IP addresses. But IP addresses, which are used to route IP services to or from a particular end user's device (*e.g.*, computer or IP phone), have no necessary relation to the physical location of the user. They are assigned at the point where the device connects to the Internet, which may or may not be in the same geographic location as the end user. Moreover, in many situations, service providers use "dynamic IP addressing" for residential users, which assigns an address each time the user connects to the Internet. Once the user ends his or her Internet session or turns off the computer, the IP address can be reassigned to another user.[4] Depending on the provider's network architecture, the IP address could be assigned to a connection in another geographic location or even another state. There is currently no commercially feasible way for providers reliably to associate a particular user's IP address with that user's specific geographic location.

[4] This ensures that IP addresses, which are limited in comparison to the number of Internet users, are not "tied up" when the user is not connected.

The NPRM asks whether VRS and IP Relay providers could obtain Registered Location information by linking it to the serial number of the consumer's VRS or IP Relay terminal or equipment. NPRM ¶ 19. But this suggestion also is based on a mistaken assumption – that "each terminal has a unique identifying number, known as a Media Access Control (MAC) address," which could be used to identify or verify a user profile which contains the registered address. *Id.* n.64. In fact, the MAC address in many cases relates to a device such as a router that is the connection point to an ISP network, not to the individual computer or terminal. Many routers have the capability to change the MAC address at will, and devices behind these routers do not pass their MAC addresses through to the ISP. Similarly, the ISP does not pass the MAC address through to other network elements, including IP Relay and VRS providers. Imposing a requirement that IP Relay and VRS providers use MAC addresses to identify consumers' registered locations, therefore, would require fundamental changes to equipment and systems that would extend well beyond providers of IP Relay and VRS.

B. IP Relay and VRS also differ from VoIP in terms of their relationship to the consumers who use the services.

A second difference between interconnected VoIP service and VRS or IP Relay exists because VoIP customers subscribe to a VoIP provider's service and are billed by the VoIP provider. The VoIP provider, therefore, needs to have an address for its subscribers. By contrast, Verizon does not bill users of its VRS or IP Relay services, and it has no service-driven reason to know its users' addresses. Users of Verizon's IP Relay and VRS services can use those services on a one-time basis without establishing an account or profile, and they can use a different provider each time they make a call. If the Commission were to impose a registration requirement, therefore, Verizon would have to create some kind of system for recording and validating user information, which does not now exist.

Moreover, privacy concerns are of paramount concern in the realm of relay services such as IP Relay and VRS, which is why the user community historically has resisted registration requirements. *See* NPRM ¶ 20. Imposing such a requirement here would create a potentially troubling database of users identified by their disabled status and linked with location information and with the provision of a particular telecommunications service.

Verizon already offers an IP Relay product that allows users to register and create a user profile in order to facilitate future calls by, for example, storing speed dial numbers and other user preferences. The user community's resistance to registration is demonstrated by the fact that that service is used to make less than two percent of the IP Relay calls that come to Verizon's center. Moreover, user profiles can quickly go stale. IP Relay service is even more mobile than VoIP service. Users can access the service from any personal computer connected to the Internet, but can also access the service from Hiptop®, BlackBerry ™, Sidekick™ or other wireless devices.[5] A registered location contained in a user's profile, therefore, is as likely to be incorrect as it is to be useful. If IP Relay providers were required to prompt users to confirm or provide their addresses each time they made a 911 call, it would introduce significant delay into the handling of such calls. Under these circumstances, having the communications assistant query the IP Relay user who dials 911 to determine his or her location is still the most accurate and safest method of transferring such a call to the appropriate PSAP to obtain emergency service.

[5] Although the Commission states that "VRS equipment, because it requires a video screen or television monitor, tends to remain at the same location," NPRM ¶ 21, this is not likely to be true for long, since technology is evolving to enable video over mobile broadband devices and integrating cameras into mobile devices.

C. The differences between IP Relay or VRS and VoIP preclude extension of other 911-related requirements to IP Relay and VRS.

The NPRM also asks whether other requirements from the *VoIP E911 Order* – such as the requirement to provide notice to subscribers of the circumstances under which E911 service may not be available, to obtain affirmative acknowledgements of these limitations from subscribers, and to provide warning labels to be affixed to the CPE used to make VoIP calls – should be extended to VRS and IP Relay providers. They should not.

The Commission has already required VRS providers to make a clear and bold written statement on their website and in their promotional materials explaining the shortcomings and potential dangers of using VRS to place an emergency call to 911.[6] The Commission should not require IP Relay or VRS providers to provide any further notice or to obtain affirmative acknowledgements from users. As explained above, Verizon does not have addresses or contact information for the users of its IP Relay and VRS services. As a result, it has no ability to send them information about circumstances under which E911 service may not be available through VRS or IP Relay, or to obtain any affirmative acknowledgement from them. Nor should the Commission require users to provide such acknowledgement through the IP Relay website. Because Verizon does not know who the users are, it has no way of recording whether a user has already acknowledged the limitations. Requiring a user to acknowledge the limitations each time he or she places a call would be cumbersome; requiring a user to acknowledge the limitations at the time he or she attempts to call 911 would delay the emergency call.

The Commission also should not require IP Relay and VRS providers to send warning labels to users of their services. As described above, users can access IP Relay services over a

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[6] *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, 17 FCC Rcd 157 at ¶ 14 (2001).

wide variety of devices. It would be difficult to create a label that would be equally usable on a personal computer or on a BlackBerry. More important, however, Verizon would have no way of knowing to whom the labels should be sent. As noted above, users do not need to "subscribe" to Verizon's services, and they do not provide addresses or other contact information to Verizon.

For all of these reasons, the Commission should not impose a requirement on IP Relay and VRS users to register their locations, and should not extend other requirements of the *VoIP E911 Order* to IP Relay and VRS providers.

II. Even if the Commission decides to adopt some type of registration requirement, it should retain jurisdiction over IP Relay and VRS for both oversight and funding purposes.

IP Relay and VRS have many of the same characteristics that caused the Commission to conclude that interconnected VoIP services like Vonage's Digital Voice "preclude any practical identification of, and separation into, interstate and intrastate communications for purposes of effectuating a dual federal/state regulatory scheme."[7] The differences between IP Relay or VRS and VoIP, noted above, only increase the practical infeasibility of identifying and separating IP Relay or VRS calls between interstate and intrastate communications.

The characteristics of VoIP services described by the Commission in its *Vonage Order* clearly apply to IP Relay and VRS. For example, Verizon "has no means of directly or indirectly identifying the geographic location of a" user of its IP Relay or VRS services. *Vonage Order* ¶ 23. Moreover, as explained above, "the significant costs and operational complexities associated with modifying or procuring systems to track, record and process geographic location information as a necessary aspect of the service would substantially reduce the benefits of using the Internet to provide the service, and potentially inhibit its deployment and continued

[7] Memorandum Opinion and Order, *Vonage Holdings Corp. Petition for Declaratory Ruling*, 19 FCC Rcd 22404, ¶ 14 (2004) ("*Vonage Order*").

availability to consumers." *Id.* As was the case with Vonage's Digital Voice service, "it is the total lack of dependence on *any* geographically defined location that most distinguishes [IP Relay and VRS] from other services whose federal or state jurisdiction is determined based on the geographic end points of the communications" and Verizon "has no service-driven reason to know users' locations." *Id.* ¶ 25 (emphasis in original).[8]

As explained above, these characteristics are even more true for IP Relay and VRS. Users can access these services from any Internet connection, and the IP or MAC addresses do not inform Verizon of its users' locations. Moreover, IP Relay and VRS generally do not use telephone numbers and Verizon does not have a billing address for its users. As a result, the characteristics of these services "preclude any practical identification of, and separation into, interstate and intrastate communications for purposes of effectuating a dual federal/state regulatory scheme."[9]

Even if the Commission were to adopt a registration requirement, which it should not, this would not give IP Relay and VRS providers the practical ability to allocate costs of these services between interstate and intrastate jurisdictions. NPRM ¶ 29. As discussed above, IP Relay is even more mobile than VoIP. Because users can access the service from handheld mobile devices like a BlackBerry or Sidekick, a user's registered primary location is unlikely to provide an accurate indication of his or her geographic location at the time a call is made.

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[8] *See also* Brief for Respondents, *Minnesota Public Utilities Commission, et al. v. FCC*, Docket Nos. 05-1069, et al., at 20, (8th Cir. filed Dec. 1, 2005) ("users [of the service] can access the service from any broadband Internet connection, and . . . there is currently no mechanism by which the Internet can inform [the service provider] of its users' geographic locations. Moreover, because [the service] is a portable service, . . . telephone numbers and billing addresses do not accurately reveal geographic locations of [the service provider's] customers; indeed [the service provider] can provide [the] service to its users regardless of where they are located.").

[9] *Vonage Order* ¶ 14.

Requiring IP Relay providers to prompt users to update their location whenever they call 911 would not provide any kind of practical identification of whether other calls (which constitute well over 99.99 percent of calls made using IP Relay) should be allocated to interstate or intrastate jurisdictions.[10] Instead, as noted above, this would merely delay the handling of the emergency call. The Commission should not subject emergency calls to such delays simply to enable the jurisdictional division of costs.

Respectfully submitted,

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[10] Requiring IP Relay providers to prompt users to update their location before *every* call would be unworkable. This would be so cumbersome for users that the service would not meet the functional equivalency test of section 225. 47 U.S.C. § 225(a)(3). And because IP Relay users do not need a telephone adapter as VoIP subscribers do, IP Relay providers would not have the ability to monitor whether the user's device had been disconnected from the network and only require an update when disconnection was detected.